1864.] DR. A. GÜNTHER ON A NEW FISH FROM MADEIRA. 301

The Philippine-Islands examples are smaller and more spotted on the breast than the Australian; but the Celebes and Timor specimens are intermediate in these points.

8. DENDROCYGNA EYTONI.

Leptotarsis eytoni, Gould, B. Austr. vii. pl. 15; Eyton, Mon. Anat. p. 111.

Dendrocygna eytoni, Gray, Cat. Gallinæ, &c., p. 131.

Hab. Northern Australia.

Mus. Brit.

Besides these species of *Dendrocygna*, of which I have seen and examined specimens, there appear to be two others which I have not yet met with, namely—

(1.) DENDROCYGNA FULVA.

Anas fulva, Gm. S. N. i. p. 530. Dendrocygna fulva, Baird, B. N. Am. p. 771, pl. 63. Hab. Mexico (Gm.); Fort Tejon, California (Baird). This is perhaps not different from the next species.

(2.) DENDROCYGNA VIRGATA.

Anas virgata, Max. Reise, i. 322. Anas fulva, Max. Beitr. iv. 918; Burm. Syst. Ueb. iii. p. 435. Hab. Middle Brazil; Rio Belmonte (Burm.).

6. ON A NEW GENUS OF PEDICULATE FISH FROM THE SEA OF MADEIRA. BY DR. ALBERT GÜNTHER, F.Z.S.

(Plate XXV.)

Mr. J. Y. Johnson discovered during his last sojourn in Madeira, on the 24th December 1863, a fish which proves to be the type of a new genus, not only on account of its extraordinary form, but also on account of the absence of ventral fins. In the latter respect it agrees with *Ceratias* from the coast of Greenland, from which, however, it differs in its dentition.

It must be extremely rare, as the specimen entrusted to me by Mr. Johnson for description, and presented by him to the British Museum, is the only one which has ever come to the knowledge of naturalists. Neither the Rev. R. T. Lowe nor Mr. Johnson had heard of its existence, nor did the fishermen recognize it. It is evidently a deep-sea fish, inhabiting the same horizontal marine zone as Saccopharynx and Alepidosaurus. When brought to Mr. Johnson, the belly was much distended, and contained, rolled up spirally into a ball, a Scopeline fish, which measured $7\frac{1}{2}$ inches in length, and 1 inch in depth. Nevertheless it was tempted to take a bait.

MELANOCETUS.

Head and body compressed, head very large, body small, abdominal cavity forming a sac suspended from the trunk. Cleft of the mouth exceedingly wide, vertical. Teeth of the jaws and palate long, pointed, unequal in size. Skin smooth. The spinous dorsal is reduced to a single filament placed on the head. The soft dorsal and anal short. Ventrals none. Slit of the gill-openings of moderate width, below the pectoral.

Melanocetus johnsonii. (Pl. XXV.)

D. 1|14. C. 8. A. 4. P. 18.

This singular fish is distinguished by a greater disproportion of the various parts of its body than is found in the other genera of the family to which it belongs. The head is of a tetrahedral form, and is the most extensive part of the whole animal. The gape is enormous, and, although the lower jaw is vertical when the mouth is closed, it can be moved downwards at more than a right angle. The lateral extensibility of the mouth is not less than the vertical; so that the prey which can be received within the cavity of the mouth actually may exceed the size of the fish itself. This enormous head is followed by a very small trunk and tail, the length of both being less than the depth of the head. As the trunk would not offer sufficient room for an abdominal cavity corresponding in size to the prey swallowed, this cavity is suspended as a large sac from the lower part of the body, and floats in the water. The upper and lower jaws are armed with a series of teeth, which are very unequal in length, some being very long, others small; all are very slender, and can be depressed towards the inside of the mouth : this peculiarity of the teeth may be observed in the Lophius, in the Pike, and numerous other rapacious fish with long slender teeth. The vomer is armed with a transverse series of single teeth, and extends across the whole width of the roof of the mouth; the palatine and pterygoid teeth are situated at some distance behind the vomer, and form two bundles irregular in form. The pharynx and cesophagus are, as might be expected, very wide. The eye is situated high up on the side of the head ; it is very small, covered by, but appearing through, the skin. There are no nasal openings. The opercular pieces are reduced to styliform rudiments; there are five branchiostegals. Only the three inner branchial arches bear short branchial lamellæ, which are disposed in a double series on the two middle ones, and in a single one on the innermost arch. The gill-opening itself is a slit of moderate width, below and behind the pectoral fin. The upper surface of the head is concave, and in the middle of its anterior portion there is situated the single filament to which the anterior dorsal fin is reduced; this filament is more than half as high as the head, and dilated into a small lamella at its extremity. The second dorsal fin occupies the back of the tail, and is composed of fourteen simple rays, none of which are as high as the fin is long. The caudal fin is quite free from the dorsal and anal, and composed of eight very

